



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/836,838 | 04/18/2001 | Tetsuya Shimizu | B422-147A | 9951 |
| 26272 | 7590 | 08/23/2007 | EXAMINER | |
| COWAN LIEBOWITZ & LATMAN P.C. JOHN J TORRENTE 1133 AVE OF THE AMERICAS NEW YORK, NY 10036 | | | VENT, JAMIE J | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2621 | | |
| | | MAIL DATE | DELIVERY MODE | |
| | | 08/23/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/836,838 | SHIMIZU, TETSUYA |
| | Examiner | Art Unit |
| | Jamie Vent | 2621 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 April 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 25, 2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable by Choi et al (US 6,285,408) in view of Hayashi et al (US 6,825,948) in further view of Hazra (US 6,510,553).

[claim 1]

In regard to Claims 1 and 8, Choi et al discloses an image processing apparatus and method comprising:

- A reception unit that receives at least three encoded image data (Figure 5 tuners 101 and 102 receive plural image data information as further described in Column 4 Lines 6-12. Additionally encoded image data is received into the system through the DVD system 301 and the tape recording/reproducing 401 system as further seen in Figure 5);
- decoding unit that decodes one of said encoded image data to generate a main frame (Column 4 Lines 7-34 allows for main frame generation for decoding plural image data and as further seen in Figure 5 HD-video decoder 104 and SD-video decoder 204);
- an image signal generation unit adapted to generate an image signal including said main frame and said subframe (Figure 4 shows the outputting means for outputting a main frame and a sub frame); however, fails to disclose a sub frame generating unit that extracts low frequency component extracted from each one of the other encoded image data and a sub frame generation unit adapted to extract low frequency component from each one of the other encoded image data, and generate sub frames using the low frequency components from the other encoded image data and an image signal generation unit adapted to combine the main frame and the generated sub frames and generate an image signal including the main frame combined with the generated sub frames.

Hayashi et al discloses a system wherein sub-frames are generated for viewing and reproducing purposes. As seen in Figure 3 a sub frame extracting unit is placed in the system which allows the sub frame generation to occur as further described in Column 4 Lines 33+. It is well known in the art to generate sub frames through using the lowest frequency component is extracted from the main frame. The sub frame generation allows for the system to be able to view multiple inputs (TV input, DVD input, or inputs from an image apparatus) through the use of viewing multiple subframes through the display device. Hazra et al discloses a system wherein the base layer (sub frames) are determined by low frequency to become the main frame as described in Column 7 Lines 25-50 and further seen in Figure 3. The base layers are displayed and further generated and extracted based on the frequency and thereby allows for the switching of sub frames to main frames. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use an image processing system, as disclosed by Choi et al, and further incorporate a system wherein sub frame generation is used for extraction of the encoded image, as described by Hayashi et al, and further incorporate the generation of sub frames through the use of low frequency to provide a better quality image that allows for main frames and sub frames to be combined to display and generate various frames, as recited in Hazra.

[claims 2 & 9]

In regard to Claims 2 and 9, Choi et al discloses an apparatus and method wherein the reception means receives said at least three encoded image data through a serial bus (Figure 4 shows the serial bus which receives the receptions of various image data.

Additionally encoded image data is received into the system through the DVD system 301 and the tape recording/reproducing 401 system as further seen in Figure 5).

[claims 3 & 10]

In regard to Claims 3 and 10, Choi et al discloses an apparatus and method wherein said serial bus is based on the IEEE1394-1995 standard (Figure 4 further shows a serial bus based on IEEE 1394-1995 standard as further described in Column 2 Lines 30-44).

[claims 4 & 11]

In regard to Claims 4 and 11, Choi et al discloses an apparatus and method wherein said reception means is a digital interface based on the IEEE1394-1995 standard (Figure 4 shows the connection of the serial bus based on the IEEE 1394-1995 standard as further described in Column 2 Lines 30-44).

[claims 5 & 12]

In regard to Claims 5 and 12, Choi et al discloses an apparatus and method further comprising: switch unit adapted to switch the encoded image data corresponding the main frame and the encoded image data corresponding to one of said sub frames in response to an operation of a predetermined operation key. (Column3 Lines 55+ describes the user selecting the display information either being main frame or sub-frame and thereby switching the image data on the display means).

[claims 6 & 13]

In regard to Claims 6 and 13, Choi et al discloses an apparatus and method further comprising: recording unit adapted to record the encoded image data corresponding to

Art Unit: 2621

main frame on a storage medium, in response to an operation of a predetermined operation key (Figure 5 element 401 shows the recording apparatus used to record information as further described in Column 7 Lines 33-45).

[claims 7 & 14]

In regard to Claims 7 and 14, Choi et al discloses an apparatus and method wherein said at least three encoded image data are based SD format of the DV standard (Column 2 Lines 3-12 describes the plural images that are based on the SD format).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hanamura et al (US 6,901,109).

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jamie Vent



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600